Teton Sales Company
P.O. Box 177
Caldwell, Idaho 83606

November 29, 2006

Valerie Greear
Technical Services Division
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

RE: CAM Plan Update for Tier I Operating Permit Application
Facility ID No. 027-00067

Dear Ms. Greear:

Teton Sales Company (Teton Sales) is submitting a response as requested by the Idaho Department of Environmental Quality (DEQ) on October 30, 2006 requesting a revised CAM plan. Below is the information requested and Teton Sales' responses.

1. In Section 5.6.3.B, change the applicable particulate matter emissions limit to 1.0 lb/hr, as provided in Tier I Operating permit Condition 3.5. The 20% opacity standard should be removed from the CAM Plan.

   Response: The applicable particulate matter emission limit has been changed to 1.0 lb/hr. The 20% opacity standard has been removed from this section of the CAM Plan.

2. The indicator range for the pressure drop across the filter should be revised to reflect the expected pressure drop across a clean filter. The current lower limit of the proposed range (-0.05 inches of water) does not appear to represent proper operation of the filter. Please revise the lower limit of the range to include a positive pressure drop. The lower limit should be supported by clean filter pressure drop data from the filter manufacturer or other technical justification.

   Response: The indicator range for the pressure drop across the filter has been revised to reflect the expected pressure drop range across a clean filter. The current lower limit of -0.05 inches of water was inadvertently included as the lower limit. The -0.05 inches of water corresponds to the lower limit indicated on the manometer, however gauge fluid is added to the manometer so that when the system is not operating the pressure reading on the manometer is equal to zero.

   A realistic lower limit that reflects the proper operation of the filter is a pressure drop greater than zero. According to the current Operations and Maintenance Manual the pressure drop will be observed every 30 minutes during operation of the spray booth. If the pressure drop is outside of the range of the clean to loaded filter pressure drop range, or within 0.02 inch water of the maximum value of the pressure drop range, then the

operation will be shut down and the filter will be replaced. Consequently, if after a clean filter is installed and the pressure drop observed is equal to zero this is an indicator that the filter is not operating properly. If this occurs, operations will be shut down and the filter will be inspected and repaired, replaced or reinstalled.

The current filter used at the facility is manufactured by Chemco Manufacturing Co. and is a Chem Loft filter. The acceptable pressure drop range has been updated to be greater than zero and less than 0.51 inches of water. The revised CAM plan and O&MM are enclosed with this letter.

3. The QA/QC practices proposed for the manometer currently state that the monometer will be calibrated per manufacturer's recommendations. Please expand upon this statement by providing the frequency the manometer will be calibrated or zeroed.

   Response: The manometer is zeroed each day prior to operation of the spray booth. The manometer will be calibrated annually per manufacturer's recommendations. The CAM plan and O&MM have been updated to include this information.

Should you have any questions regarding the information submitted, please contact myself or Melissa Armer of JBR Environmental Consultants, Inc. at 208.853.0883.

I certify that based on information and belief formed after reasonable inquiry, the statements and information enclosed are true, accurate and complete to the best of my knowledge.

Respectfully Submitted,

Diane Puri

Diane Puri
Teton Sales Company

cc: Melissa Armer, JBR

Enclosures: Revised CAM Plan
Revised O&M Manual

Teton Sales

Operations and Maintenance
For the
Door-Coating Spray Booth Filtration System

Prepared for:

Teton Sales
P. O. Box 177
Caldwell, ID 83606

Prepared by:

JBR Environmental Consultants, Inc.
7669 West Riverside Drive Suite 101
Boise, ID 83714

November 29, 2006

TABLE OF CONTENTS

LIST OF FIGURES

Introduction

An Operations and Maintenance (O and M) manual is required for the door-coating spray booth filtration system, pursuant to section 3.7 of the Title V permit no. 027-00067. The manual is required to assure particulate emissions are controlled to a minimum of a 99% capture efficiency at all times during operation of the spray booth. The contents of this O and M manual shall contain the following:

- General description of the spray booth and its ventilation system
- Normal operating conditions and procedures
- Particulate matter filter manufacturer documentation verifying a minimum capture efficiency of 99%
- The appropriate pressure drop range
- Maintenance and corrective action procedures

General Description of the Spray Booth and its Ventilation System

The spray booth operation is located in the building at 518 Kit Avenue. The building size is approximately 10,000 sq. ft. The exhaust fan to the spray booth is rated at 25,000 cfm. The spray booth filter covering the exhaust system is approximately 4 feet high by 16 feet long by 1.5 inches thick. The fan itself also contains a filter, removing some material prior to final discharge to the atmosphere. The ventilation system runs when the spay booth is in operation; at other non-operating times the ventilation system is shut off. A process diagram is shown in Figure 1.

Normal Operating Conditions and Procedures

In the 518 Kit Avenue building, doors are conveyed on hangers via a suspended, continuous overhead track. Doors are hand attached to hangers, and then pass the spray booth. The doors are sprayed with an air-assisted airless spray with a hand-held reciprocator application. The spray material overspray exits through a filter system and then is discharged to the atmosphere. The filter is securely attached to a hanger system. The ventilation system is turned on by pressing a button behind the filter system, when the process in 518 Kit Avenue begins, and turned off by pressing the same button once the process is complete.

Particulate Matter Filter Manufacturer Documentation Verifying a Minimum Capture Efficiency of 99%

Teton Sales has selected an overspray collector system by Chemco Manufacturing Company for the spray booth operation. The filter media is Chem Loft (part no. 48ROLLCLOFT), with an average efficiency of 99.69%. In the future, if another equivalent filter system is used at a later time, Teton Sales will notify IDEQ and submit verification of filter efficiency to IDEQ at that time.

The Appropriate Pressure Drop Range

For the Chem Loft filter, the initial pressure drop is greater than zero inch water for a clean filter and 0.51 inch water for a completely loaded filter. The filter will be replaced or reinstalled if the initial pressure drop across a clean filter is less than or equal to zero inch water. The filter will be replaced when the pressure drop is 0.02 inch less than the maximum pressure drop of 0.51 inches.

Teton Sales has installed a Dwyer Mark II Molded Plastic Manometer for measuring the pressure drop. The manometer was installed and is operated in accordance with the instructions provided by Dwyer Instruments, Inc.

Maintenance and Corrective Action Procedures

Maintenance procedures will be as follows:

- The filtration system will be visually inspected prior to spray booth operation and the turning on of the exhaust fan. If defects in the filter are noticed, then the filter will be replaced prior to operation.
- The manometer will be zeroed each day prior to operation of the spray booth.
- Once the exhaust fan is turned on, the manometer pressure readings will be observed and recorded. If the pressure drop is outside the range of clean to loaded filter pressure drop, or within 0.02 inch of the of the maximum value of the pressure drop range, then the filter will be replaced prior to operation.
- The manometer will be observed every 30 minutes during the operation. If the pressure drop is outside of the range of the clean to loaded filter pressure drop range, or within 0.02 inch water of the maximum value of the pressure drop range, then the operation will be shut down and the filter will be replaced.
- The operation will be shut down if the exhaust fan is malfunctioning. The fan system will be repaired before the operation resumes.
- If monthly opacity readings show an opacity exceedence based on EPA Method 9, then Teton Sales will thoroughly inspect the spray booth filtration system and replace the filter if necessary. If the filtration system is working properly, Teton Sales will determine what other part of the process is causing the exceedence and take corrective action immediately.
- The monometer maintenance will be performed as follows:
  - Check oil level occasionally and adjust zero knob as required.
  - Be sure all pressure is removed by disconnecting tubing at top of gage before adjusting zero knob.
  - Add oil only when necessary.
  - Use oil as specified by the manufacturer—other fluids may damage the gage.
  - Clean with a soft cloth using a little pure soap and water.
  - Use a small brush if necessary to aid with cleaning the knobs.
  - Avoid cleaning fluids with chlorinated solvent as they may damage the gage.

Figure 1 -- Process Flow Diagram

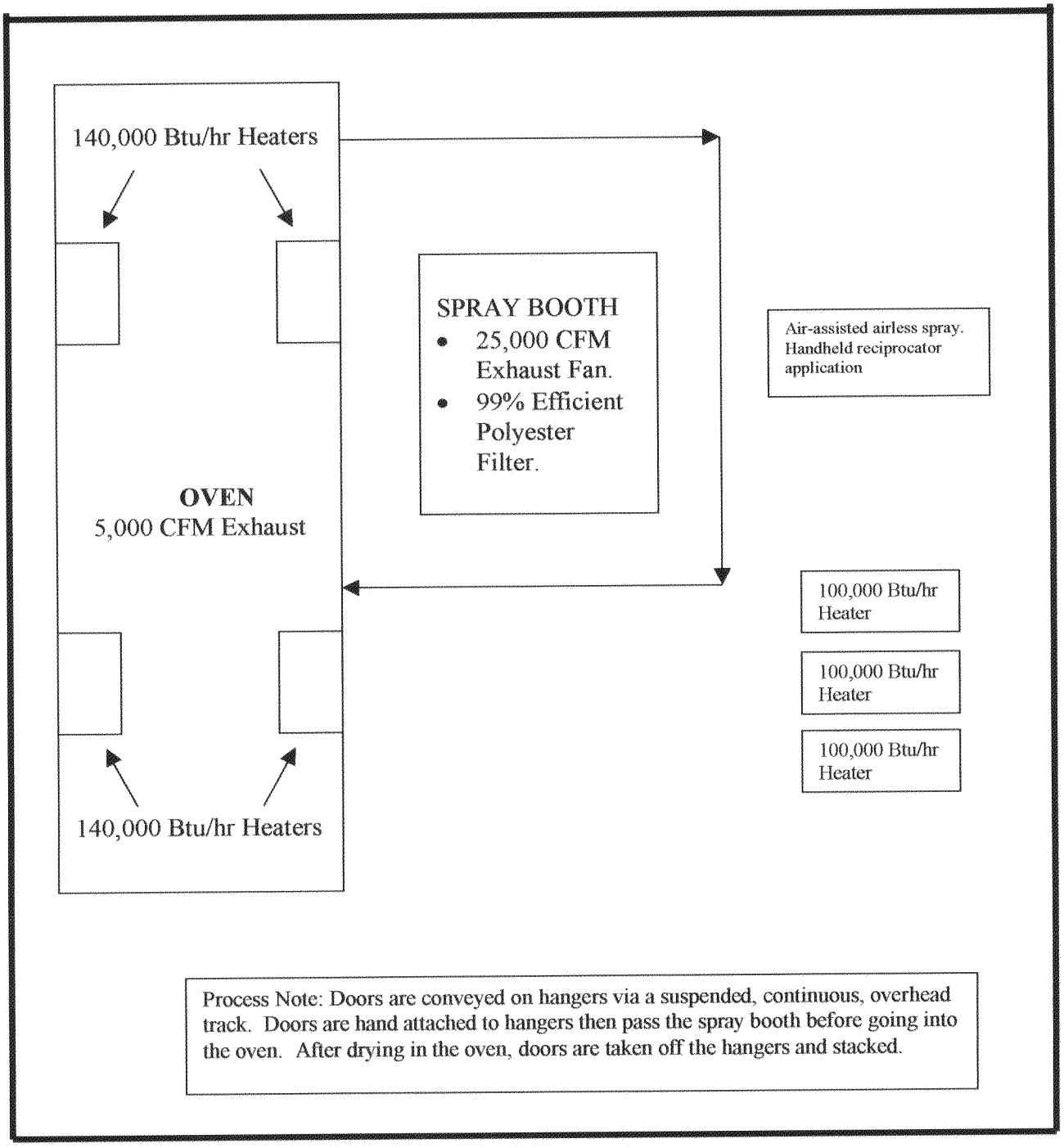


Figure 2 -- Manufacturer's Control Efficiency Guarantee

PAINT ARRESTANCE FILTER TEST REPORT

Spray Removal Efficiency & Paint Holding Capacity

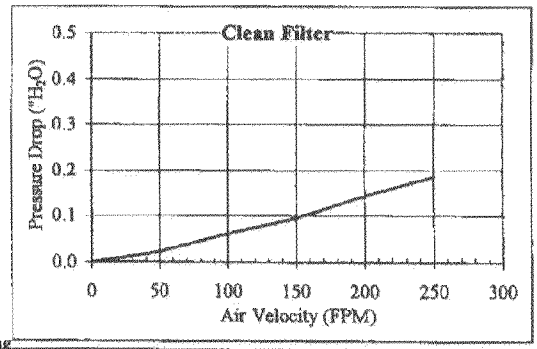
Tested for:	**Chemco Mfg. Co.**
Filter Mfr.:	**Chemco Mfg. Co.**
Filter Name/Model:	**Chem Loft**
Report#./Test#	**R 169 T 231**
Report Date:	**Oct. 30, 1998**

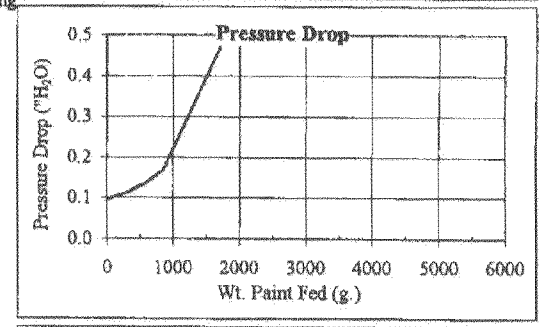
Test Information

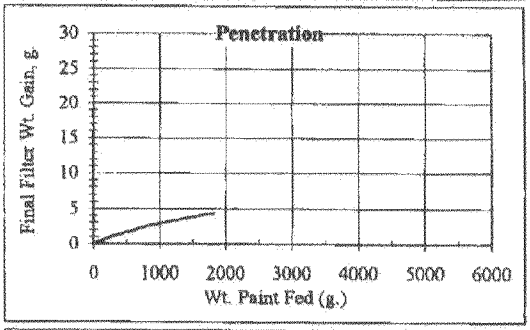
FILTER DESCRIPTION (20" x 20" pad):
[redacted] poly foam pad, 1"dense foam on 1/2" very dense foam backing
PAINT DESCRIPTION:
[redacted] High Solids Baking Enamel (S.W. Permaclad 2400, red)
PAINT SPRAY METHOD:
[redacted] Conventional Air Gun at 40 PSI
SPRAY FEED RATE:
[redacted] **139** gr./min. **130** cc./min.
AIR VELOCITY:
[redacted] **160** FPM

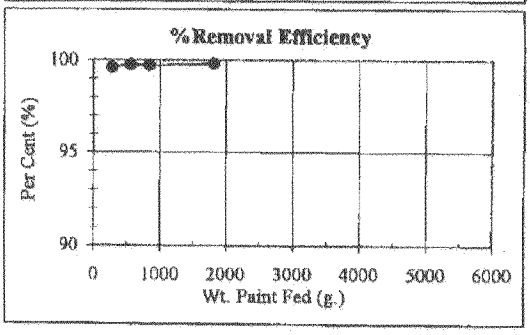
Test Results

INITIAL PRESSURE DROP of Clean Test Filter
[redacted] **0.10** in. water
FINAL PRESSURE DROP of Loaded Test Filter
[redacted] **0.51** in. water
WEIGHT GAIN on TEST FILTER & Test Frame Trough
[redacted] **1436** grams
PAINT HOLDING CAPACITY of TEST FILTER
[redacted] **1410** grams = **3.1** lbs.
PAINT RUN-OFF
[redacted] **26** grams
WEIGHT GAIN - FINAL FILTER
[redacted] **4.4** grams = **PENETRATION**
AVERAGE REMOVAL EFFICIENCY of TEST FILTER
[redacted] **99.69** %









Test Engineer: P. Tuzinski
Supervising Engineer: K. C. Kwok, Ph.D.

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5.6.2 40 CFR PART 64 COMPLIANCE ASSURANCE MONITORING (CAM)

40 CFR 64 establishes applicability to pollutant-specific emissions units at a major source that is required to obtain a part 70 or 71 permit. The following citations are the criteria for determining applicability:

> 40 CFR 64.2(a)(1): The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or surrogate thereof), other than an emission standard or limitation that is exempt under paragraph (b)(1) of the rule.
>
> 40 CFR 64.2(a)(2): The unit uses a control device to achieve compliance with any such emission limitation or standard; and
>
> 40 CFR 64.2(a)(3): The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in 40 CFR 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

Teton Sales is not exempt from any of the emission standards and has a unit that uses a control device to achieve compliance with an emission standard. The spray booth has pre-control emissions greater than 100 tons per year as shown in the Table 5.6-1 below:

Table 5.6-1 CAM applicability

Door Coating Line Controlled PM Emissions

Emission Source	Product	Max. Application Rate (gal/hr)	Density of Mixture (lb/gal)[b]	Wt. Fraction Solids (lb PM/lb Mixture)[b]	Transfer Efficiency (%)	Control Efficiency (%)	PM Emissions (lb/hr)	PM Emissions (T/yr)[a]
Door Coating Line Spray Booth	White Water-Based Enamel (Product No. 660-20W020-472)	18	10.66	0.4774	50	99	0.46	1.51

[a]Based on 6,600 hr/yr.

[b]From MSDS/RCR

Door Coating Line Uncontrolled PM Emissions

Emission Source	Product	Max. Application Rate (gal/hr)	Density of Mixture (lb/gal)	Wt. Fraction Solids (lb PM/lb Mixture)	Transfer Efficiency (%)	PM Emissions (lb/hr)	PM Emissions (T/yr)[d]
Door Coating Line Spray Booth	White Water-Based Enamel (Product No. 660-20W020-472)	18	10.66	0.4774	50	45.80	200.61

[d]Based on 8,760 hr/yr.

The CAM rule is applicable to the door coating line spray booth so a CAM plan must be developed.

5.6.3 COMPLIANCE ASSURANCE MONITORING PLAN

I. Background

A. Emission Unit

Description: Door Coating Operations
Identification: Spray Booth
Facility: Teton Sales Co.

B. Applicable Regulations, Emission Limits, and Monitoring Requirements

Applicable Permits: Tier I Operating Permit 027-00067

Emission Limits: Particulate matter emissions shall not exceed 1.0 lb/hr.

Monitoring Requirements: Particulate matter filters must maintain a minimum capture efficiency of 99%.

C. Control Technology

The door-coating spray booth is equipped with a Chemco Manufacturing Co. Chem Loft filtration system.

II. Monitoring Approach

The key elements of the monitoring approach are presented below.

A. Indicator

Pressure drop across the filtration system will be used as an indicator.

B. Measurement Approach

The filtration system pressure differential is measured using a Dwyer Mark II Molded Plastic Manometer.

C. Indicator Range

The indicator range is a pressure drop greater than zero and less than 0.51 inches of water.

D. Performance Criteria

Data Representativeness:	The manometer continuously measures the air pressure and has +/- 3% accuracy up to 10 psi and up to 140°F.
Verification of Operational Status:	The filtration system will be visually inspected prior to spray booth operation and the turning on of the exhaust fan. Once the exhaust fan is turned on, the manometer pressure readings will be observed and recorded.
QA/ QC Practices and Criteria:	The monometer is zeroed each day prior to operation of the paint booth and calibrated annually per manufacturer's recommendations.
Monitoring Frequency and Data Collection Procedure:	The manometer will be observed every 30 minutes during the operation. If the pressure drop is outside of the range of the clean to loaded filter pressure drop range, or within 0.02 inch water of the maximum value of the pressure drop range, then the operation will be shut down and the filter will be replaced.

III. Justification

A. Background

Unpainted doors are conveyed on hangers via a suspended, continuous overhead track. The doors are sprayed with paint in the spray booth before being dried in a heated drying oven. The pollutant-specific emission unit (PSEU) is the spray booth itself which uses a Chemco Manufacturing Co. Chem Loft filtration system to reduce PM emissions from paint overspray. The Chem Loft filtration system has an average 99.69% paint removal efficiency. A Dwyer Mark II Molded Plastic Manometer measures the filtration system pressure differential.

B. Rationale for Selection of Performance Indicator

To ensure compliance with the minimum capture efficiency of 99%, the filter system pressure differential must be greater than zero and less than 0.51 inches of water. This optimum pressure drop helps to ensure the filter is working properly and is most efficient. When the exhaust fan is turned on and once every 30 minutes during operation, the monometer is observed. If the pressure drop is outside the range of clean to loaded filter pressure drop, or within 0.02 inch of the of the maximum value of the pressure drop range, then the filter will be shut down and the filter will be replaced.

C. Rationale, Plan, and Schedule for Selection of Indicator Range

The indicator range for the filtration system is based on the manufacturer's design and operating guidelines. The selected pressure drop range was chosen to ensure the minimum capture efficiency of 99% is maintained. A permit deviation occurs when opacity is more than 20% for more than three minutes in any 60-minute period. If the exhaust emissions exceed this rate a permit deviation occurs and is documented.

ıble 9.1-2 Compliance Demonstration for Specific Emission Units

TETON SALES COMPANY COMPLIANCE PLAN FOR SPECIFIC EMISSION UNITS				
ffected Emission Unit	**Applicable Requirements**	**Compliance Demonstration Method**	**Status**	**Schedule for Compliance**
or Spray Booth	Particulate matter filters – minimum PM capture efficiency of 99%. IDAPA 58.01.01.322.01	Teton Sales installed a Chemco Manufacturing Co. Chem Loft filtration system that is guaranteed to have an average paint removal efficiency of 99.69%.	Compliance is demonstrated.	Teton Sales has demonstrated compliance with the PM capture efficiency requirement and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.
	Filtration System Pressure Drop Monitoring Equipment IDAPA 58.01.01.322.06	Teton Sales has installed, calibrated, maintained and operates in accordance with the manufacturers specifications, pressure drop monitoring equipment to monitor the pressure drop of the filtration system.	Compliance is demonstrated.	Teton Sales has demonstrated compliance with the filtration system pressure drop monitoring equipment requirement and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.
	Filtration System Pressure Drop Recordkeeping IDAPA 58.01.01.322.06	The pressure differential shall be recorded once per day while the Spray Booth is operating normally.	Compliance is demonstrated.	Teton Sales has demonstrated compliance with the filtration system pressure drop recordkeeping requirements and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.

TETON SALES COMPANY

COMPLIANCE PLAN FOR SPECIFIC EMISSION UNITS

ffected Emission Unit	Applicable Requirements	Compliance Demonstration Method	Status	Schedule for Compliance
	Filtration System Pressure Drop Operating Range IDAPA 58.01.01.322.01 IDAPA 58.01.01.322.06, 07	Teton Sales has determined the appropriate pressure drop range is greater than zero and less than 0.51 inches of water column.	The range determined was based on the systems physical characteristics, the airflow through the system, and the particulate matter filter manufacturer specifications and recommendations. Compliance is demonstrated.	Teton Sales has demonstrated compliance with the filtration system pressure drop operating range requirements and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.
	O & M Manual Requirements IDAPA 58.01.01.322.01	Teton Sales has developed an O & M Manual for the PM filtration system that describes the procedures that will be followed to comply with the system pressure drop operating range and process weight calculations.	Compliance is demonstrated.	Teton Sales has demonstrated compliance with the O & M Manual requirements and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.
	Throughput Limits: Paint Coating – 118,800 gal/yr IDAPA 58.01.01.322.01	Monitor and record throughput hourly and daily.	Compliance is demonstrated.	Teton Sales has demonstrated compliance with the throughput limit and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.
	Hours of Operation Limits: Spray Booth – 6,600 hrs/yr IDAPA 58.01.01.322.01	Document daily the hours of operation.	Compliance is demonstrated.	Teton Sales has demonstrated compliance with the hours of operation limit and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.
	Process Weight: PM Emissions shall not exceed 1.0 lb/hr. IDAPA 58.01.01.700, 701	See process weight calculations in Section 6.0 of this application.	Compliance is demonstrated.	Teton Sales has demonstrated compliance with the process weight limit and will be in compliance at the time the Tier I is issued and will remain in compliance the remainder of the Tier I OP term.